

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-Q**

(Mark One)

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

For the quarterly period ended: March 31, 2018

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 0-11412

**AMTECH SYSTEMS, INC.**

(Exact name of registrant as specified in its charter)

Arizona	86-0411215
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
131 South Clark Drive, Tempe, Arizona	85281
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: 480-967-5146

Indicate by a 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).  Yes  No

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

Large accelerated filer

Accelerated filer

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

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

Shares of Common Stock outstanding as of May 4, 2018: 14,896,004

AMTECH SYSTEMS, INC. AND SUBSIDIARIES  
TABLE OF CONTENTS

	Page
<b><u>PART I. FINANCIAL INFORMATION</u></b>	
<b><u>Item 1. Condensed Consolidated Financial Statements</u></b>	
<u>Condensed Consolidated Balance Sheets</u> <u>March 31, 2018 (Unaudited) and September 30, 2017</u>	<u>3</u>
<u>Condensed Consolidated Statements of Operations (Unaudited)</u> <u>Three and Six Months Ended March 31, 2018 and 2017</u>	<u>4</u>
<u>Condensed Consolidated Statements of Comprehensive Income (Loss) (Unaudited)</u> <u>Three and Six Months Ended March 31, 2018 and 2017</u>	<u>5</u>
<u>Condensed Consolidated Statements of Cash Flows (Unaudited)</u> <u>Six Months Ended March 31, 2018 and 2017</u>	<u>6</u>
<u>Notes to Condensed Consolidated Financial Statements (Unaudited)</u>	<u>7</u>
<b><u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u></b>	
<u>Cautionary Statement Regarding Forward-Looking Statements</u>	<u>13</u>
<u>Overview</u>	<u>14</u>
<u>Results of Operations</u>	<u>14</u>
<u>Liquidity and Capital Resources</u>	<u>17</u>
<u>Off-Balance Sheet Arrangements</u>	<u>18</u>
<u>Contractual Obligations</u>	<u>18</u>
<u>Critical Accounting Policies</u>	<u>18</u>
<u>Impact of Recently Issued Accounting Pronouncements</u>	<u>18</u>
<b><u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u></b>	<b><u>19</u></b>
<b><u>Item 4. Controls and Procedures</u></b>	<b><u>19</u></b>
<b><u>PART II. OTHER INFORMATION</u></b>	
<u>Item 1. Legal Proceedings</u>	<u>20</u>
<u>Item 1A. Risk Factors</u>	<u>20</u>
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	<u>20</u>
<u>Item 3. Defaults Upon Senior Securities</u>	<u>20</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>21</u>
<u>Item 5. Other Information</u>	<u>21</u>
<u>Item 6. Exhibits</u>	<u>21</u>
<b><u>SIGNATURES</u></b>	<b><u>22</u></b>

**PART I. FINANCIAL INFORMATION**

**Item 1. Condensed Consolidated Financial Statements**

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Balance Sheets**  
(in thousands, except share data)

	<b>March 31, 2018</b>	<b>September 30, 2017</b>
Assets	(Unaudited)	
<b>Current Assets</b>		
Cash and cash equivalents	\$ 50,495	\$ 51,121
Restricted cash	9,662	24,640
Accounts receivable		
Trade (less allowance for doubtful accounts of \$1,499 and \$866 at March 31, 2018, and September 30, 2017, respectively)	22,719	22,519
Unbilled and other	18,651	14,275
Inventories	29,043	30,210
Vendor deposits	3,034	11,806
Other	2,633	2,542
<b>Total current assets</b>	<b>136,237</b>	<b>157,113</b>
<b>Property, Plant and Equipment - Net</b>	16,083	15,792
<b>Intangible Assets - Net</b>	3,289	3,495
<b>Goodwill - Net</b>	11,646	11,405
<b>Investments</b>	2,616	2,615
<b>Deferred Income Taxes - Long-Term</b>	200	200
<b>Other Assets - Long-Term</b>	946	1,003
<b>Total Assets</b>	<b>\$ 171,017</b>	<b>\$ 191,623</b>
<b>Liabilities and Stockholders' Equity</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 19,129	\$ 21,555
Accrued compensation and related taxes	6,865	7,592
Accrued warranty expense	1,495	1,254
Other accrued liabilities	3,262	2,056
Customer deposits	18,260	48,784
Current maturities of long-term debt	369	361
Deferred profit	5,085	4,081
Income taxes payable	1,933	286
<b>Total current liabilities</b>	<b>56,398</b>	<b>85,969</b>
<b>Long-Term Debt</b>	8,217	8,134
<b>Income Taxes Payable - Long-Term</b>	3,490	7,037
<b>Total Liabilities</b>	<b>68,105</b>	<b>101,140</b>
<b>Commitments and Contingencies</b>		
<b>Stockholders' Equity</b>		
Preferred stock; 100,000,000 shares authorized; none issued	—	—
Common stock; \$0.01 par value; 100,000,000 shares authorized; shares issued and outstanding: 14,896,004 and 14,710,591 at March 31, 2018 and September 30, 2017, respectively	149	147
Additional paid-in capital	127,367	125,564
Accumulated other comprehensive loss	(7,192)	(8,529)
Retained deficit	(17,412)	(26,699)
<b>Total stockholders' equity</b>	<b>102,912</b>	<b>90,483</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 171,017</b>	<b>\$ 191,623</b>

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

[Table of Contents](#)

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Statements of Operations**  
**(Unaudited)**  
**(in thousands, except per share data)**

	Three Months Ended March 31,		Six Months Ended March 31,	
	2018	2017	2018	2017
Revenues, net of returns and allowances	\$ 32,783	\$ 32,944	\$ 106,394	\$ 62,079
Cost of sales	21,058	24,549	74,332	45,241
Gross profit	11,725	8,395	32,062	16,838
Selling, general and administrative	9,478	8,260	20,058	15,258
Research, development and engineering	2,182	1,535	4,173	3,163
Operating income (loss)	65	(1,400)	7,831	(1,583)
Income (loss) from equity method investment	28	52	2	(91)
Interest expense and other income, net	(38)	(197)	(86)	(116)
Income (loss) before income taxes	55	(1,545)	7,747	(1,790)
Income tax (benefit) provision	(2,780)	194	(1,540)	284
<b>Net income (loss)</b>	<b>2,835</b>	<b>(1,739)</b>	<b>9,287</b>	<b>(2,074)</b>
Add: net loss attributable to noncontrolling interest	—	319	—	599
<b>Net income (loss) attributable to Amtech Systems, Inc.</b>	<b>\$ 2,835</b>	<b>\$ (1,420)</b>	<b>\$ 9,287</b>	<b>\$ (1,475)</b>
<b>Income (Loss) Per Share:</b>				
Basic income (loss) per share attributable to Amtech shareholders	\$ 0.19	\$(0.11)	\$ 0.63	\$ (0.11)
Weighted average shares outstanding	14,891	13,188	14,835	13,184
Diluted income (loss) per share attributable to Amtech shareholders	\$ 0.19	\$(0.11)	\$ 0.61	\$ (0.11)
Weighted average shares outstanding	15,154	13,188	15,223	13,184

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

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Statements of Comprehensive Income (Loss)**  
**(Unaudited)**  
**(in thousands)**

	<b>Three Months Ended March 31,</b>		<b>Six Months Ended March 31,</b>	
	<b>2018</b>	<b>2017</b>	<b>2018</b>	<b>2017</b>
Net income (loss)	\$ 2,835	\$ (1,739)	\$ 9,287	\$ (2,074)
Foreign currency translation adjustment	796	318	1,337	(623)
Comprehensive income (loss)	3,631	(1,421)	10,624	(2,697)
Comprehensive loss attributable to noncontrolling interest	—	293	—	668
Comprehensive income (loss) attributable to Amtech Systems, Inc.	<u>\$ 3,631</u>	<u>\$ (1,128)</u>	<u>\$ 10,624</u>	<u>\$ (2,029)</u>

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

[Table of Contents](#)

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Statements of Cash Flows**  
**(Unaudited)**  
**(in thousands)**

	Six Months Ended March 31,	
	2018	2017
<b>Operating Activities</b>		
Net income (loss)	\$ 9,287	\$ (2,074)
Adjustments to reconcile net income (loss) to net cash (used in) provided by operating activities:		
Depreciation and amortization	916	1,255
Write-down of inventory	126	51
Capitalized interest	143	204
Deferred income taxes	(23)	24
Non-cash share based compensation expense	463	624
(Gain) loss on sale of property, plant and equipment	(57)	9
(Gain) loss from equity method investment	(2)	91
Provision for (reversal of) allowance for doubtful accounts, net	48	(1,217)
Changes in operating assets and liabilities:		
Restricted cash	15,710	(1,703)
Accounts receivable	(3,642)	(2,002)
Inventories	1,644	1,840
Accrued income taxes	(1,899)	169
Vendor deposits and other assets	9,097	(5,557)
Accounts payable	(2,954)	1,823
Customer deposits and accrued liabilities	(31,481)	17,531
Deferred profit	819	520
Net cash (used in) provided by operating activities	<u>(1,805)</u>	<u>11,588</u>
<b>Investing Activities</b>		
Purchases of property, plant and equipment	(686)	(210)
Proceeds from sale of property, plant and equipment	68	34
Net cash used in investing activities	<u>(618)</u>	<u>(176)</u>
<b>Financing Activities</b>		
Proceeds from the exercise of stock options	1,340	94
Payments on long-term debt	(183)	(319)
Borrowings on long-term debt	—	137
Net cash provided by (used in) financing activities	<u>1,157</u>	<u>(88)</u>
<b>Effect of Exchange Rate Changes on Cash and Cash Equivalents</b>	<u>640</u>	<u>(119)</u>
<b>Net (Decrease) Increase in Cash and Cash Equivalents</b>	<u>(626)</u>	<u>11,205</u>
<b>Cash and Cash Equivalents, Beginning of Period</b>	<u>51,121</u>	<u>27,655</u>
<b>Cash and Cash Equivalents, End of Period</b>	<u>\$ 50,495</u>	<u>\$ 38,860</u>

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

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**THREE AND SIX MONTHS ENDED MARCH 31, 2018 AND 2017**  
**(UNAUDITED)**

**1. Basis of Presentation and Significant Accounting Policies**

**Nature of Operations and Basis of Presentation** – Amtech Systems, Inc. (the “Company”, “Amtech”, “we”, “our” or “us”) is a global manufacturer of capital equipment, including thermal processing, silicon wafer handling automation, and related consumables used in fabricating solar cells, LED and semiconductor devices. We sell these products to solar cell and semiconductor manufacturers worldwide, particularly in Asia, the United States and Europe.

We serve niche markets in industries that are experiencing rapid technological advances and which historically have been very cyclical. Therefore, future profitability and growth depend on our ability to develop or acquire and market profitable new products and on our ability to adapt to cyclical trends.

The accompanying unaudited condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”), and consequently do not include all disclosures normally required by accounting principles generally accepted in the United States of America. In the opinion of management, the accompanying unaudited interim condensed consolidated financial statements contain all adjustments necessary, all of which are of a normal and recurring nature, to present fairly our financial position, results of operations and cash flows. Certain information and note disclosures normally included in financial statements have been condensed or omitted pursuant to the rules and regulations of the SEC. These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K, as amended, for the fiscal year ended September 30, 2017.

The consolidated results of operations for the three and six months ended March 31, 2018, are not necessarily indicative of the results to be expected for the full fiscal year.

**Principles of Consolidation** – The consolidated financial statements include the accounts of the Company and our wholly-owned subsidiaries and subsidiaries in which we have a controlling interest. We report non-controlling interests in consolidated entities as a component of equity separate from our equity. The equity method of accounting is used for investments over which we have a significant influence but not a controlling financial interest. All material intercompany accounts and transactions have been eliminated in consolidation. Effective July 1, 2017, we purchased the non-controlling interest in SoLayTec B.V. (“SoLayTec”), pursuant to which SoLayTec became a wholly-owned subsidiary of Amtech. Beginning July 1, 2017, the non-controlling interest will no longer be reported. Prior amounts have not been restated.

**Use of Estimates** – The preparation of consolidated 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 and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

**Revenue Recognition** – We review product and service sales contracts with multiple deliverables to determine if separate units of accounting are present. Where separate units of accounting exist, revenue allocated to delivered items is the lower of the relative selling price of the delivered items in the sales arrangement or the portion of the selling price that is not contingent upon performance of the service.

We recognize revenue when persuasive evidence of an arrangement exists; the product has been delivered and title has transferred, or services have been rendered; and the seller’s price to the buyer is fixed or determinable and collectability is reasonably assured. For us, this policy generally results in revenue recognition at the following points:

1. For our equipment business, transactions where legal title passes to the customer upon shipment, we recognize revenue upon shipment for those products where the customer’s defined specifications have been met with at least two similarly configured systems and processes for a comparably situated customer. Our selling prices may include both equipment and services, i.e., installation and start-up services performed by our service technicians. The equipment and services are multiple deliverables. Certain equipment that has a positive track record of successful installation and customer acceptance are considered to be routine systems. Our recognition of revenue upon delivery of such equipment that has been routinely installed and accepted is equal to the total selling price minus the relative selling price of the undelivered services.

Where the installation and acceptance of more than two similarly configured items of equipment have not become routine, recognition of revenue upon delivery of equipment is limited to the lesser of (i) the total selling price minus the relative selling price of the undelivered services or (ii) the non-contingent amount. Since we defer only those costs directly related to installation, or another unit of accounting not yet delivered, and the portion of the contract price is often considerably greater than the relative selling price of those items, our policy at times will result in deferral of profit that is disproportionate in relation to the deferred revenue. When this is the case, the gross margin recognized in one period will be lower and the gross margin reported in a subsequent period will improve.

2. For products where the customer's defined specifications have not been met with at least two similarly configured systems and processes, the revenue and directly related costs are deferred at the time of shipment and later recognized at the time of customer acceptance or when this criterion has been met. We have, on occasion, experienced longer than expected delays in receiving cash from certain customers pending final installation or system acceptance. If some customers refuse to pay the final payment, or otherwise delay final acceptance or installation, the deferred revenue would not be recognized, adversely affecting future cash flows and operating results.
3. Sales of certain equipment, spare parts and consumables are recognized upon shipment, as there are no post shipment obligations other than standard warranties.
4. Service revenue is recognized upon performance of the services requested by the customer. Service contract revenue is recognized as services are performed over the term of the contract, which generally results in ratable recognition over the period of the contract.

**Deferred Profit** – Revenue deferred pursuant to our revenue policy, net of the related deferred costs, if any, is recorded as deferred profit in current liabilities. The components of deferred profit are as follows, in thousands:

	<b>March 31, 2018</b>	<b>September 30, 2017</b>
Deferred revenues	\$ 7,793	\$ 6,822
Deferred costs	2,708	2,741
Deferred profit	<u>\$ 5,085</u>	<u>\$ 4,081</u>

**Shipping Expense** – Shipping expenses of \$0.7 million and \$0.5 million for the three months ended March 31, 2018 and 2017, respectively, are included in selling, general and administrative expenses. Shipping expenses of \$1.9 million and \$0.9 million for the six months ended March 31, 2018 and 2017, respectively, are included in selling, general and administrative expenses.

**Research, Development and Engineering Expense** – The table below shows gross research and development expenses and grants earned, in thousands:

	<b>Three Months Ended March 31,</b>		<b>Six Months Ended March 31,</b>	
	<b>2018</b>	<b>2017</b>	<b>2018</b>	<b>2017</b>
Research, development and engineering	\$ 2,528	\$ 1,943	\$ 4,818	\$ 3,773
Grants earned	(346)	(408)	(645)	(610)
Net research, development and engineering	<u>\$ 2,182</u>	<u>\$ 1,535</u>	<u>\$ 4,173</u>	<u>\$ 3,163</u>

**Foreign Currency Transactions and Translation** – We use the U.S. dollar as our reporting currency. Our operations in Europe, China and other countries are primarily conducted in their functional currencies, the Euro, Renminbi, or the local country currency, respectively. Accordingly, assets and liabilities of the foreign subsidiaries are translated into U.S. dollars at the exchange rate in effect at the balance sheet dates. Income and expense items are translated at the average exchange rate for each month within the year. The resulting translation adjustments are recorded directly in accumulated other comprehensive income (loss), net of tax - foreign currency translation adjustments as a separate component of stockholders' equity. Net foreign currency transaction gains/losses, including transaction gains/losses on intercompany balances that are not of a long-term investment nature and non-functional currency cash balances, are reported as a separate component of non-operating (income) expense in our consolidated statements of operations.



**Concentrations of Credit Risk**— Our customers consist of solar cell and semiconductor manufacturers worldwide, as well as the lapping and polishing marketplace. Financial instruments that potentially subject us to significant concentrations of credit risk consist principally of cash and trade accounts receivable. Credit risk is managed by performing ongoing credit evaluations of the customers’ financial condition, by requiring significant deposits where appropriate, and by actively monitoring collections. Letters of credit are required of certain customers depending on the size of the order, type of customer or its creditworthiness, and country of domicile.

As of March 31, 2018, one customer individually represented 41% of accounts receivable. As of September 30, 2017, two customers individually represented 24% and 11% of accounts receivable.

We maintain our cash, cash equivalents and restricted cash in multiple financial institutions. Balances in the United States, which account for approximately 64% and 45% of total cash balances as of March 31, 2018 and September 30, 2017, respectively, are primarily invested in U.S. Treasuries or are in financial institutions insured by the Federal Deposit Insurance Corporation (“FDIC”). The remainder of our cash is maintained with financial institutions with reputable credit ratings in The Netherlands, France, China, the United Kingdom, Singapore and Malaysia.

Refer to Note 9 to Condensed Consolidated Financial Statements for information regarding major customers, foreign sales and revenue in other countries subject to fluctuation in foreign currency exchange rates.

**Impact of Recently Issued Accounting Pronouncements**

In March 2016, the Financial Accounting Standards Board (the “FASB”) issued Accounting Standards Update (“ASU”) 2016-09, “Compensation - Stock Compensation (Topic 718).” ASU 2016-09 identifies areas for simplification involving several aspects of accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, an option to recognize gross stock compensation expense with actual forfeitures recognized as they occur, as well as certain classifications on the statement of cash flows. The amendments in this ASU are effective for annual periods beginning after December 15, 2016 and for the interim periods therein. This new standard increases volatility in the statement of operations by requiring all excess tax benefits and deficiencies to be recognized as discrete income tax benefits or expenses in the statement of operations in the period in which they occur. We adopted the new standard as of October 1, 2017, and prospectively applied the provisions in this guidance requiring recognition of excess tax benefits and deficits in the statement of operations. Also, as a result of the adoption of the new standard, we made an accounting policy election to recognize forfeitures as they occur and no longer estimate expected forfeitures. The provisions in this guidance requiring the use of a modified retrospective transition method would have required us to record a cumulative-effect adjustment in retained earnings as of October 1, 2017. On the basis of immateriality, we recorded such cumulative-effect adjustment as stock-based compensation in the first quarter of 2018 rather than adjusting retained earnings. Lastly, we applied the provisions of this guidance relating to classification on the statement of cash flows retrospectively with no material effect on our cash flows.

There have been no other material changes or additions to the recently issued accounting standards other than those previously reported in Note 1 to our Consolidated Financial Statements in Part II, Item 8 of our Annual Report on Form 10-K, as amended, for the year ended September 30, 2017 that affect or may affect our financial statements.

**2. Earnings Per Share**

Basic earnings per share (“EPS”) is computed by dividing net income (loss) by the weighted average number of common shares outstanding for the period. Diluted EPS is computed similarly to basic EPS except that the denominator is increased to include the number of additional common shares that would have been outstanding if potentially dilutive common shares had been issued. In the case of a net loss, diluted earnings per share is calculated in the same manner as basic EPS.

For the three and six months ended March 31, 2018, options for 422,000 and 296,000 weighted average, respectively, shares were excluded from the diluted EPS calculations because they were anti-dilutive. For the three and six months ended March 31, 2017, options for 1,669,000 and 1,696,000 weighted average shares, respectively, were excluded from the diluted EPS calculations because they were anti-dilutive. These shares could be dilutive in the future.

The following table outlines basic and diluted EPS, in thousands, except per share amounts:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2018	2017	2018	2017
<b>Basic Income (Loss) Per Share Computation</b>				
Net income (loss) attributable to Amtech Systems, Inc.	\$ 2,835	\$ (1,420)	\$ 9,287	\$ (1,475)
Weighted Average Shares Outstanding:				
Common stock	14,891	13,188	14,835	13,184
Basic income (loss) per share attributable to Amtech shareholders	\$ 0.19	\$ (0.11)	\$ 0.63	\$ (0.11)
<b>Diluted Income (Loss) Per Share Computation</b>				
Net income (loss) attributable to Amtech Systems, Inc.	\$ 2,835	\$ (1,420)	\$ 9,287	\$ (1,475)
Weighted Average Shares Outstanding:				
Common stock	14,891	13,188	14,835	13,184
Common stock equivalents (1)	263	—	388	—
Diluted shares	15,154	13,188	15,223	13,184
Diluted income (loss) per share attributable to Amtech shareholders	\$ 0.19	\$ (0.11)	\$ 0.61	\$ (0.11)

(1) The number of common stock equivalents is calculated using the treasury method and the average market price during the period.

**3. Inventory**

The components of inventories are as follows, in thousands:

	March 31, 2018	September 30, 2017
Purchased parts and raw materials	\$ 16,250	\$ 14,789
Work-in-process	9,639	11,078
Finished goods	3,154	4,343
	\$ 29,043	\$ 30,210

#### 4. Equity and Stock-Based Compensation

Stock-based compensation expense was \$0.2 million and \$0.3 million in the three months ended March 31, 2018 and 2017, respectively, and was \$0.5 million and \$0.6 million in the six months ended March 31, 2018 and 2017, respectively, and was included in selling, general and administrative expenses.

The following table summarizes our stock option activity during these six months ended March 31, 2018:

	<b>Options</b>	<b>Weighted Average Exercise Price</b>
Outstanding at beginning of period	1,560,441	\$ 7.95
Granted	—	—
Exercised	(185,413)	7.07
Forfeited	(35,239)	17.79
Outstanding at end of period	<u>1,339,789</u>	\$ 7.81
Exercisable at end of period	<u>1,137,748</u>	\$ 8.04
Weighted average fair value of options granted during the period	\$ —	

On March 28, 2018, we announced that our Board of Directors approved a stock repurchase program, pursuant to which we may repurchase up to \$4 million of our outstanding common stock, par value \$0.01 per share, over a one-year period, commencing on April 2, 2018. Repurchases under the program will be made in open market transactions at prevailing market prices, in privately negotiated transactions, or by other means in compliance with the rules and regulations of the Securities and Exchange Commission; however, we have no obligation to repurchase shares and the timing, actual number, and value of shares to be repurchased is subject to management's discretion and will depend on the Company's stock price and other market conditions. We may, in the sole discretion of the Board of Directors, terminate the repurchase program at any time while it is in effect. We intend to retire any repurchased shares. There were no shares repurchased during the quarter ended March 31, 2018.

## 5. Income Taxes

The quarterly income tax provision is calculated using an estimated annual effective tax rate, based upon expected annual income, permanent items, statutory rates and planned tax strategies in the various jurisdictions in which we operate. However, losses in certain jurisdictions and discrete items are treated separately.

Deferred tax assets and liabilities reflect the tax effects of temporary differences between the carrying value of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. We record a valuation allowance if, based on the weight of available evidence, it is more likely than not that some portion or all of a deferred tax asset will not be realized. Our expectations regarding realization of our deferred tax assets is based upon the weight of all available evidence, including such factors as our recent earnings history, expected future taxable income and available tax planning strategies. In prior periods, we established valuation allowances on substantially all net deferred tax assets, after considering all of the available objective evidence, both positive and negative, historical and prospective, with greater weight given to historical evidence, and determined it is not more likely than not that these assets will be realized.

The Tax Cuts and Jobs Act (the "Act") was enacted on December 22, 2017, and permanently reduces the U.S. federal corporate tax rate from 35% to 21%, eliminated corporate Alternative Minimum Tax, modified rules for expensing capital investment, and limits the deduction of interest expense for certain companies. The Act is a fundamental change to the taxation of multinational companies, including a shift from a system of worldwide taxation with some deferral elements to a territorial system, current taxation of certain foreign income, a minimum tax on low-tax foreign earnings, and new measures to curtail base erosion and promote U.S. production.

As a result of the Act, the statutory rate applicable to our fiscal year ending September 30, 2018 will be 24.5%, based on a fiscal year blended rate calculation. Accounting Standard Codification ("ASC") 740 requires filers to record the effect of tax law changes in the period enacted. However, the SEC issued Staff Accounting Bulletin No. 118 ("SAB 118"), that permits filers to record provisional amounts during a measurement period ending no later than one year from the date of enactment. In the first quarter of fiscal 2018, we re-measured the applicable deferred tax assets based on the rates at which they are expected to reverse. We adjusted our gross deferred tax assets and liabilities and recorded a corresponding offset to our full valuation allowance against our net deferred tax assets, which resulted in minimal net effect to our provision for income taxes and effective tax rate. We have not made any other provisional adjustments as a result of the Act.

The Act includes a one-time mandatory repatriation transition tax on certain net accumulated earnings and profits of our foreign subsidiaries. We are still in the process of analyzing the earnings and profits and tax pools of our foreign subsidiaries to reasonably estimate the effects of the one-time transition tax and, therefore, have not recorded a provisional impact. The tax expense impact of the one-time transition tax to be determined may be partially or fully offset by a release of valuation allowance for the utilization of existing net operating losses and tax credits that may reduce the amount of related taxes payable. We expect the accounting for this aspect of the Act to be complete by the end of fiscal 2018. As of March 31, 2018, consistent with historical conclusions, our cash balances held in foreign locations are expected to be permanently reinvested outside the United States as the impact of the Act on our current position is not yet fully understood and is still under evaluation.

We are assessing the applicability of the other provisions in the Act and expect to complete this analysis by the end of fiscal 2018.

For the three and six months ended March 31, 2018, we recorded an income tax benefit of \$2.8 million and \$1.5 million, respectively. Over the last several months, we have undertaken an effort to resolve an uncertain tax position in specific tax jurisdictions. We have worked with tax experts in the local jurisdictions and in the U.S. to review the transactions and tax laws that resulted in this uncertain tax position, as well as the related interest and penalties. At the conclusion of this review, we determined that the Company is not liable for withholding taxes nor the associated interest and penalties in one of the jurisdictions. Therefore, during the second quarter of fiscal 2018 we reversed the accrued tax, interest and penalties relating to this jurisdiction, which total \$3.1 million, which was partially offset by income tax expense relating to our consolidated pre-tax income.

The difference in our effective tax rate from the U.S. statutory rate primarily reflects the impact of the resolution of the uncertain tax position discussed above, as well as a mix of domestic and international pre-tax income and valuation allowance. In 2017 and in fiscal 2018, we reversed a portion of the valuation allowance related to net operating loss carryforwards which we have determined will be utilized against net operating income in the current year.

We classify all of our uncertain tax positions as income taxes payable long-term. At March 31, 2018 and September 30, 2017, the total amount of unrecognized tax benefits was approximately \$1.2 million and \$4.2 million, respectively. Income taxes payable long-term includes other items, primarily withholding taxes that are not due until the related intercompany service fees are paid.

We classify interest and penalties related to unrecognized tax benefits as income tax expense. As of March 31, 2018 and September 30, 2017, we had an accrual for potential interest and penalties of approximately \$0.6 million and \$2.6 million, respectively, classified with income taxes payable long-term.

Amtech and one or more of our subsidiaries file income tax returns in The Netherlands, Germany, France, China and other foreign jurisdictions, as well as in the U.S. and various states in the U.S. We have not signed any agreements with the Internal Revenue Service, any state or foreign jurisdiction to the extend the statute of limitations for any fiscal year. As such, the number of open years is the number of years dictated by statute in each of the respective taxing jurisdictions, which generally is from 3 to 5 years.

## 6. Commitments and Contingencies

**Purchase Obligations** – As of March 31, 2018, we had unrecorded purchase obligations in the amount of \$19.3 million compared to \$34.4 million as of September 30, 2017. These purchase obligations consist of outstanding purchase orders for goods and services. While the amount represents purchase agreements, the actual amounts to be paid may be less in the event that any agreements are renegotiated, canceled or terminated.

**Development Projects** – In fiscal 2014, our wholly owned subsidiary, Tempres Systems, Inc. (“Tempres”), entered into an agreement with the Energy Research Centre of the Netherlands (“ECN”), a Netherlands government-sponsored research institute, for a joint research and development project. Under the terms of the agreement, Tempres sold an ion implanter (“Equipment”) to ECN for \$1.4 million. Both Tempres and ECN are performing research and development projects utilizing the Equipment at the ECN facilities. Each party to the agreement will have 100% rights to the results of the projects developed separately by the individual parties. Any results co-developed will be jointly owned. Tempres met its requirement to contribute \$1.4 million to the project in the form of installation of the Equipment, acceptance testing, project meeting attendance, training, parts, and service, including keeping the Equipment in good condition and repair for the first two years of the agreement prior to fiscal 2017.

**EPA Accrual** – As a result of the BTU International, Inc. (“BTU”) acquisition, we assumed BTU’s proportional responsibility for clean-up costs at a Superfund site. As an equipment manufacturer, BTU generated and disposed of small quantities of solid waste that were considered hazardous under Environment Protection Agency (“EPA”) regulations. Because BTU historically used a waste disposal firm that disposed of the solid waste at a site that the EPA designated as a Superfund site, BTU was named by the EPA as one of the entities responsible for a portion of the expected clean-up costs. Based on our proportional responsibility, as negotiated with and agreed to by the EPA, our liability related to this matter is less than \$0.1 million, which is included in Other Accrued Liabilities in the Condensed Consolidated Balance Sheets as of March 31, 2018 and September 30, 2017. In accordance with the agreement, BTU established a letter of credit for \$0.2 million to the benefit of the EPA for potential cash payments as settlements for our proportional liability, which is included in Restricted Cash in the Condensed Consolidated Balance Sheets as of March 31, 2018 and September 30, 2017.

**Legal Proceedings** – We are defendants from time to time in actions for matters arising out of our business operations. We regularly evaluate the status of the legal proceedings in which we are involved to assess whether a loss is probable or there is a reasonable possibility that a loss, or an additional loss, may have been incurred and determine if accruals are appropriate. If accruals are not appropriate, we further evaluate each legal proceeding to assess whether an estimate of possible loss or range of possible loss can be made for disclosure. Although litigation is inherently unpredictable, we believe that we have adequate provisions for any probable and estimable losses. It is possible, nevertheless, that our consolidated financial position, results of operations or liquidity could be materially and adversely affected in any particular period by the resolution of a legal proceeding. Legal expenses related to defense, negotiations, settlements, rulings and advice of outside legal counsel are expensed as incurred.

**Employment Contracts** – We have employment contracts with, and severance plans covering, certain officers and management employees under which severance payments would become payable in the event of specified terminations without cause or terminations under certain circumstances after a change in control. If severance payments under the current employment agreements or plan payments were to become payable, the severance payments would generally range from twelve to thirty-six months of salary.

## 7. Shareholder Rights Plan

In December 2008, Amtech and Computershare Trust Company, N.A., as Rights Agent (the “Rights Agent”), entered into an Amended and Restated Rights Agreement (the “Restated Rights Agreement”) which amended and restated the terms governing the previously authorized shareholder rights (each a “Right”) to purchase fractional shares of our Series A Participating Preferred Stock (“Series A Preferred”) currently attached to each of our outstanding shares of common stock, par value \$0.01 per share. As amended, each Right entitles the registered holder to purchase from us one one-thousandth of a share of Series A Preferred at an exercise price of \$51.60 (the “Exercise Price”), subject to adjustment. The Rights will expire 10 years after issuance and will be exercisable if (a) a person or group becomes the beneficial owner of 5% or more of our common stock or (b) a person or group commences a tender or exchange offer that would result in the offeror beneficially owning 15% or more of our common stock. The Final Expiration Date (as defined in the Restated Rights Agreement) is December 14, 2018.

In October 2015, we entered into a Second Amended and Restated Rights Agreement (the “Second Restated Rights Agreement”) with the Rights Agent, which expands the definition of Exempted Person in the Restated Rights Agreement to include any person that our Board of Directors (the “Board”), in its sole and absolute discretion, exempts from becoming an Acquiring Person (as defined in the Restated Rights Agreement) under the Second Restated Rights Agreement. A person deemed an Exempted Person under the Second Restated Rights Agreement cannot trigger any of the Rights provided therein so long as such Exempted Person complies with the terms and conditions by which the Board approved such exemption from the Restated Rights Agreement.

As previously disclosed, in October 2015, we entered into a Letter Agreement (the “Agreement”) by and between Amtech and certain shareholders of Amtech who jointly file (the “Joint Filers”) under Section 13 of the Securities Exchange Act of 1934, as amended. One of the Joint Filers became a member of our Board after the Agreement was approved by the Board. The Agreement permits the Joint Filers, pursuant to the Second Restated Rights Agreement, to individually acquire shares of common stock of Amtech that would, in the aggregate, bring the Joint Filers’ collective ownership to no more than 19.9% of our issued and outstanding common stock at any time. In the event the Joint Filers’ collective ownership at any time exceeds 19.9% of our issued and outstanding shares of common stock, we are entitled to specific performance and all other remedies entitled to us at law or equity, among others. Our Board approved the Agreement and transactions contemplated thereunder, and has the sole authority to terminate the Agreement at any time.

## 8. Business Segment Information

Our three reportable segments are as follows:

**Solar** – We are a leading supplier of thermal processing systems, including related automation, parts and services, to the solar/photovoltaic industry and also offer PECVD (plasma-enhanced chemical vapor deposition) equipment to the global solar market.

**Semiconductor** – We design, manufacture, sell and service thermal processing equipment and related controls for use by leading semiconductor manufacturers, and in electronics, automotive and other industries.

**Polishing** – We produce consumables and machinery for lapping (fine abrading) and polishing of materials, such as sapphire substrates, optical components, silicon wafers, numerous types of crystal materials, ceramics and metal components.

[Table of Contents](#)

Information concerning our business segments is as follows, in thousands:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2018	2017	2018	2017
Net Revenues:				
Solar *	\$ 12,598	\$ 16,555	\$ 61,795	\$ 27,979
Semiconductor	16,582	13,443	37,473	29,146
Polishing	3,603	2,946	7,126	4,954
	<u>\$ 32,783</u>	<u>\$ 32,944</u>	<u>\$ 106,394</u>	<u>\$ 62,079</u>
Operating income (loss):				
Solar *	\$ (1,903)	\$ (1,878)	\$ 3,449	\$ (2,901)
Semiconductor	2,257	1,403	5,261	3,763
Polishing	1,111	503	2,215	967
Non-segment related	(1,400)	(1,428)	(3,094)	(3,412)
	<u>\$ 65</u>	<u>\$ (1,400)</u>	<u>\$ 7,831</u>	<u>\$ (1,583)</u>

\* The financial statement of business units included in the Solar segment include some sales of equipment and parts to the semiconductor, silicon wafer and MEMS industries, comprising less than 25% of the Solar segment revenue.

	March 31, 2018	September 30, 2017
Identifiable Assets:		
Solar	\$ 71,147	\$ 97,999
Semiconductor	59,761	57,177
Polishing	6,814	5,078
Non-segment related	33,295	31,369
	<u>\$ 171,017</u>	<u>\$ 191,623</u>

Non-segment related assets include cash, property and other assets. We review our long-lived assets, including goodwill, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Additional information on impairment testing of long-lived assets, intangible assets and goodwill can be found in Note 1 of our Annual Report on Form 10-K, as amended, for the year ended September 30, 2017.

## 9. Major Customers and Foreign Sales

During the six months ended March 31, 2018, one customer individually represented 38% of our net revenues. No other customer represented greater than 10% of net revenues. During the six months ended March 31, 2017, one customer individually represented 19% of our net revenues.

Our net revenues were to customers in the following geographic regions:

	Six Months Ended March 31,	
	2018	2017
United States	10 %	16 %
Other	1 %	2 %
<b>Total North America</b>	<b>11 %</b>	<b>18 %</b>
China	64 %	29 %
Malaysia	3 %	18 %
Taiwan	5 %	13 %
Other	3 %	8 %
<b>Total Asia</b>	<b>75 %</b>	<b>68 %</b>
Germany	6 %	5 %
Other	8 %	9 %
<b>Total Europe</b>	<b>14 %</b>	<b>14 %</b>
	<u><b>100 %</b></u>	<u><b>100 %</b></u>

## Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our "Condensed Consolidated Financial Statements" in Item 1 of this Quarterly Report on Form 10-Q ("Quarterly Report") and our consolidated financial statements and related notes included in Item 8, "Financial Statements and Supplementary Data" in our Annual Report on Form 10-K, as amended, for the fiscal year ended September 30, 2017.

### Cautionary Statement Regarding Forward-Looking Statements

Certain information contained or incorporated by reference in this Quarterly Report is forward-looking in nature. All statements included or incorporated by reference in this Quarterly Report or made by management of Amtech Systems, Inc. and its subsidiaries (the "Company" or "Amtech"), other than statements of historical fact, are hereby identified as "forward-looking statements" (as such term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended). The forward-looking statements in this Quarterly Report relate only to events or information as of the date on which the statements are made in this

Quarterly Report. Examples of forward-looking statements include statements regarding Amtech's future financial results, operating results, business strategies, projected costs, products under development, competitive positions and plans and objectives of the Company and its management for future operations. In some cases, forward-looking statements can be identified by terminology such as "may," "will," "should," "would," "expects," "plans," "anticipates," "intends," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology. Some factors that could cause actual results to differ materially from those anticipated include, among others, future economic conditions, including changes in the markets in which we operate; changes in demand for our services and products; our ability to successfully complete the turnkey orders and the associated costs and risks related thereto; difficulties in successfully executing our growth initiatives; the effects of competition in the markets in which we operate, including the adverse impact of competitive product announcements or new entrants into our markets and transfers of resources by competitors into our markets; control of costs and expenses; risks associated with new technologies and the impact on our business; legislative, regulatory, and competitive developments in markets in which we operate; possible future claims, litigation or enforcement actions and the results of any such claim, litigation proceeding, or enforcement action; and other circumstances and risks identified in this Quarterly Report or referenced from time to time in our filings with the United States Securities and Exchange Commission. These and many other factors could affect Amtech's future operating results and financial condition, and could cause actual results to differ materially from expectations based on forward-looking statements made in this document or elsewhere by Amtech or on its behalf.

You should not place undue reliance on these forward-looking statements. We cannot guarantee that any forward-looking statement will be realized, although we believe that the expectations reflected in the forward-looking statements are reasonable as of the date of this Quarterly Report. Achievement of future results is subject to events out of our control, risks, uncertainties and potentially inaccurate assumptions. The Annual Report on Form 10-K, as amended, that we filed with the Securities and Exchange Commission for the year-ended September 30, 2017 listed various important factors that could affect Amtech's future operating results and financial condition and could cause actual results to differ materially from historical results and expectations based on forward-looking statements made in this document or elsewhere by Amtech or on its behalf. These factors can be found under the heading "Item 1A. Risk Factors" in the Annual Report on Form 10-K, as amended, and investors should refer to them as well as the additional risk factors identified in this Quarterly Report. Because it is not possible to predict or identify all such factors, any such list cannot be considered a complete set of all potential risks or uncertainties. Except as required by law, we undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events, or otherwise.

## **Introduction**

Management's Discussion and Analysis ("MD&A") is intended to facilitate an understanding of our business and results of operations. MD&A consists of the following sections:

- Overview
- Results of Operations
- Liquidity and Capital Resources
- Off-Balance Sheet Arrangements
- Contractual Obligations
- Critical Accounting Policies
- Impact of Recently Issued Accounting Pronouncements

**Overview**

We operate in three reportable business segments: (i) Solar, (ii) Semiconductor and (iii) Polishing. In our Solar segment, we are a leading global supplier of thermal processing systems, including diffusion, plasma-enhanced chemical vapor deposition (“PECVD”), atomic layer deposition (“ALD”), and related automation, parts and services, to the solar photovoltaic industry. In our Semiconductor segment, we supply thermal processing equipment, including solder reflow equipment and related controls and diffusion for use by leading semiconductor manufacturers, and in electronics assembly for automotive and other industries. In our Polishing segment, we produce consumables and machinery for lapping (fine abrading) and polishing of materials, such as sapphire substrates, optical components, silicon wafers, numerous types of crystalline materials, ceramics and metal components.

Our customers are primarily manufacturers of solar cells and integrated circuits. The solar cell and semiconductor industries are cyclical and historically have experienced significant fluctuations. Our revenue is impacted by these broad industry trends. The solar cell industry has experienced a structural imbalance between supply and demand. This imbalance has increased competitive pressure on selling prices and negatively impacted our results of operations. Our high throughput equipment platforms, technologies for higher cell efficiency, greater knowledge of the complete cell manufacturing process and advanced automation have contributed significantly to our success in securing the large orders for the first two phases of a multi-phase turnkey project announced in January and April of 2017 from a new solar cell manufacturer in China. For equipment orders that are not part of turnkey projects, we compete with Chinese equipment manufacturers that offer lower prices, liberal payment terms and have a more substantial local presence. We are finding it more difficult to participate in the capacity expansions of those Chinese companies that already have significant experience with all facets of producing solar cells and at least some prior experience working with the local equipment vendors. While we will continue to focus on developing advanced products and technologies, we plan to seek further cost reductions to address the competition from Chinese equipment vendors. We are investigating various aspects of outsourcing some of our key solar products to China in order to lower the cost of our products and expand our presence in that market.

The equipment for the large follow-on turnkey order announced in April 2017 (“Phase II”) shipped in the first quarter of fiscal 2018 and we continue to recognize revenue from the associated installation, integration and start-up services for Phase I. Our quarterly and annual operating results have been and will continue to be impacted by the timing of large system orders. Further, the solar and semiconductor equipment industries are highly cyclical and the conditions of the industries we operate in are volatile. Therefore, our order flow fluctuates quarter to quarter. For additional information regarding the risks related to our business and industry, please refer to Item 1A. Risk Factors in our Annual Report on Form 10-K, as amended, for the fiscal year ended September 30, 2017.

**Results of Operations**

The following table sets forth certain operational data as a percentage of net revenue for the periods indicated:

	Three Months Ended		Six Months Ended	
	March 31, 2018	March 31, 2017	March 31, 2018	March 31, 2017
Net revenue	100 %	100 %	100 %	100 %
Cost of sales	64 %	75 %	70 %	73 %
Gross margin	36 %	25 %	30 %	27 %
Selling, general and administrative	29 %	25 %	19 %	25 %
Research, development and engineering	7 %	5 %	4 %	5 %
Operating income (loss)	0 %	(5)%	7 %	(3)%
Income (loss) from equity method investment	1 %	0 %	0 %	0 %
Interest expense and other income, net	0 %	0 %	0 %	0 %
Income (loss) before income taxes	1 %	(5)%	7 %	(3)%
Income tax (benefit) provision	(8)%	0 %	(2)%	0 %
Net income (loss)	9 %	(5)%	9 %	(3)%
Add: net loss attributable to noncontrolling interest	0 %	1 %	0 %	1 %
Net income (loss) attributable to Amtech Systems, Inc.	9 %	(4)%	9 %	(2)%



**Net Revenue**

Net revenue consists of revenue recognized upon shipment or installation of equipment, with the exception of products using new technology, for which revenue is recognized upon customer acceptance. Spare parts sales are recognized upon shipment and service revenue is recognized upon completion of the service activity, which is generally ratable over the term of the service contract. Since the majority of our revenue is generated from large system sales, revenue and operating income can be significantly impacted by the timing of system shipments, and recognition of revenue based on customer acceptances. The revenue of business units included in the Solar segment include some sales of equipment and parts to the semiconductor, silicon wafer and microelectromechanical (“MEMS”) industries, comprising less than 25% of the Solar segment revenue. Our net revenue by operating segment was as follows (dollars in thousands):

Segment	Three Months Ended March 31,				Six Months Ended March 31,			
	2018	2017	Incr (Decr)	% Change	2018	2017	Incr (Decr)	% Change
Solar	\$ 12,598	\$ 16,555	\$ (3,957)	(24)%	\$ 61,795	\$ 27,979	\$ 33,816	121%
Semiconductor	16,582	13,443	3,139	23%	37,473	29,146	8,327	29%
Polishing	3,603	2,946	657	22%	7,126	4,954	2,172	44%
Total net revenue	\$ 32,783	\$ 32,944	\$ (161)	—%	\$ 106,394	\$ 62,079	\$ 44,315	71%

Total net revenue for the quarters ended March 31, 2018 and 2017 was \$32.8 million and \$32.9 million, respectively, a decrease of approximately \$0.2 million or less than 1%. Revenue from the Solar segment decreased 24% compared to the prior year quarter due to lower shipments of our solar equipment. We are operating in a challenging competitive environment due to lower prices and liberal payment terms that are offered from Chinese equipment manufacturers. These competitive pricing pressures are making it increasingly difficult for us to participate in our customers’ solar expansions. Revenue from our Semiconductor segment increased 23% compared to the prior year quarter due primarily to favorable market conditions and strong customer demand for our thermal processing systems. Revenue from the Polishing segment increased 22% compared to the prior year quarter due primarily to strong customer demand leading to increased sales of polishing templates and equipment.

Total net revenue for the six months ended March 31, 2018 and 2017 was \$106.4 million and \$62.1 million, respectively, an increase of \$44.3 million or 71%. Revenue from the Solar segment increased 121% compared to the prior year period due primarily to shipments relating to Phase II of the previously announced turnkey order. Revenue from the Semiconductor segment increased 29% compared to the prior year period due primarily to strong customer demand for our thermal processing systems and diffusion furnaces. Revenue from the Polishing segment increased 44% compared to the prior year period due primarily to strong customer demand leading to increased shipments of polishing templates and equipment.

**Backlog and Orders**

Our backlog as of March 31, 2018 and 2017 was \$63.1 million and \$87.4 million, respectively, a decrease of \$24.3 million or 28%. Our backlog as of March 31, 2018 includes approximately \$35.0 million of orders and deferred revenue from our Solar segment customers compared to \$66.9 million at March 31, 2017, with the decrease primarily due to the shipment of the Phase I and Phase II equipment. New orders booked in the quarter ended March 31, 2018 were \$28.8 million (\$7.0 million Solar segment) compared to \$68.2 million (\$46.9 million Solar segment) of customer orders in the quarter ended March 31, 2017. The backlog of business units included in the Solar segment include some sales of equipment and parts to the semiconductor, silicon wafer and MEMS industries, comprising less than 25% of the Solar segment backlog.

As of March 31, 2018, two customers individually accounted for 14% and 12% of our backlog. The orders included in our backlog are generally credit approved customer purchase orders believed to be firm and are generally expected to ship within the next twelve months. Because our orders are typically subject to cancellation or delay by the customer, our backlog at any particular point in time is not necessarily representative of actual sales for succeeding periods, nor is backlog any assurance that we will realize profit from completing these orders. Our backlog also includes revenue deferred pursuant to our revenue recognition policy, derived from orders that have already been shipped, but which have not met the criteria for revenue recognition.

**Gross Profit and Gross Margin**

Gross profit is the difference between net revenue and cost of goods sold. Cost of goods sold consists of purchased material, labor and overhead to manufacture equipment and spare parts and the cost of service and support to customers for installation, warranty and paid service calls. Gross margin is gross profit as a percent of net revenue. Our gross profit and gross margin by operating segment were as follows (dollars in thousands):

Segment	Three Months Ended March 31,					Six Months Ended March 31,				
	2018	Gross Margin	2017	Gross Margin	Incr (Deer)	2018	Gross Margin	2017	Gross Margin	Incr (Deer)
Solar	\$ 3,110	25%	\$ 1,947	12%	\$ 1,163	\$ 14,423	23%	\$ 3,558	13%	\$ 10,865
Semiconductor	7,075	43%	5,628	42%	1,447	14,563	39%	11,723	40%	2,840
Polishing	1,540	43%	820	28%	720	3,076	43%	1,557	31%	1,519
Total gross profit	<u>\$ 11,725</u>	36%	<u>\$ 8,395</u>	25%	<u>\$ 3,330</u>	<u>\$ 32,062</u>	30%	<u>\$ 16,838</u>	27%	<u>\$ 15,224</u>

Gross profit for the three months ended March 31, 2018 and 2017 was \$11.7 million (36% of net revenue) and \$8.4 million (25% of net revenue), respectively, an increase of \$3.3 million. Gross margin on products from our Solar segment increased compared to the three months ended March 31, 2017, due primarily to higher-margin product mix and recognition of previously deferred revenue. Gross profit on products from our Semiconductor segment increased compared to the three months ended March 31, 2017, due primarily to increased sales volume in the second quarter of 2018. Gross profit and gross margin on products from our Polishing segment increased from the prior year period, primarily due to increased sales volume and product mix. For the three months ended March 31, 2018, we recognized previously deferred gross profit of \$0.8 million. For the three months ended March 31, 2017, we deferred gross profit of \$1.2 million.

Gross profit for the six months ended March 31, 2018 and 2017 was \$32.1 million (30% of net revenue) and \$16.8 million (27% of net revenue), respectively, an increase of \$15.2 million. Gross margin on products from our Solar segment increased compared to the six months ended March 31, 2017, due primarily to fixed costs being spread over higher sales volumes during the first half of fiscal 2018. Gross profit on products from our Semiconductor segment increased due to increased sales volume in the first half of 2018, with gross margin decreasing due to product mix. Gross profit and gross margin on products from our Polishing segment increased from the prior year period, primarily due to higher sales of new products with higher margins. For the six months ended March 31, 2018, we deferred gross profit of \$1.3 million. For the six months ended March 31, 2017, we deferred gross profit of \$0.9 million.

**Selling, General and Administrative**

Selling, general and administrative expenses (“SG&A”) consists of the cost of employees, consultants and contractors, facility costs, sales commissions, shipping costs, promotional marketing expenses, legal and accounting expenses and bad debt expense.

SG&A expenses for the three months ended March 31, 2018 and 2017 were \$9.5 million and \$8.3 million, respectively. SG&A increased compared to the prior year quarter due primarily to increased selling, freight and employee-related expenses.

SG&A expenses for the six months ended March 31, 2018 and 2017 were \$20.1 million and \$15.3 million, respectively. Compared to the six months ended March 31, 2017, the increase in SG&A was primarily due to higher commissions, freight and other selling expenses related to higher revenues and higher employee-related expenses. Also, for the six months ended March 31, 2017, SG&A expenses were reduced by the collections of previously reserved accounts receivable of approximately \$1.0 million.

**Research, Development and Engineering**

Research, development and engineering (“RD&E”) expenses consist of the cost of employees, consultants and contractors who design, engineer and develop new products and processes as well as materials and supplies used in producing prototypes. We receive governmental research and development grants which are netted against these expenses when certain conditions have been met.

RD&E expense, net of grants earned, for the three months ended March 31, 2018 and 2017 were \$2.2 million and \$1.5 million, respectively, an increase of \$0.6 million, due primarily to increased R&D spending in our Solar segment. RD&E expense, net of

grants earned, for the six months ended March 31, 2018 and 2017 were \$4.2 million and \$3.2 million, respectively, an increase of \$1.0 million, due primarily to increased R&D spending in our Solar segment.

### ***Income Taxes***

For the three and six months ended March 31, 2018 we recorded an income tax benefit of \$2.8 million and \$1.5 million, respectively. For the three and six months ended March 31, 2017 we recorded income tax expense of \$0.2 million and \$0.3 million, respectively. During the quarter ended March 31, 2018, we resolved an uncertain tax position and reversed the associated accrued tax, penalties and interest, which total \$3.1 million. This reversal resulted in an income tax benefit for the three and six months ended March 31, 2018, which was partially offset by income tax expense on our consolidated pre-tax income. The income tax provisions are based upon estimates of annual income, annual permanent differences and statutory tax rates in the various jurisdictions in which we operate, except that certain loss jurisdictions and discrete items are treated separately.

Generally accepted accounting principles require that a valuation allowance be established when it is “more likely than not” that all or a portion of deferred tax assets will not be realized. A review of all available positive and negative evidence needs to be considered, including a company’s performance, the market environment in which the company operates and the length of carryback and carryforward periods. According to those principles, it is difficult to conclude that a valuation allowance is not needed when the negative evidence includes cumulative losses in recent years. Therefore, in fiscal 2017, cumulative losses weighed heavily in the overall assessment. As a result of the review, where cumulative losses had been incurred, we continue to maintain a full valuation allowance for substantially all net deferred tax assets in the U.S. and foreign jurisdictions, including the carryforwards of U.S. net operating losses and foreign tax credits, which were acquired in the merger with BTU International, Inc. and net operating losses in Europe.

### **Liquidity and Capital Resources**

At March 31, 2018 and September 30, 2017, cash and cash equivalents were \$50.5 million and \$51.1 million, respectively, a decrease of \$0.6 million. Restricted cash decreased by \$15.0 million to \$9.7 million at March 31, 2018 from \$24.6 million at September 30, 2017. Our working capital was \$79.8 million as of March 31, 2018 and \$71.1 million as of September 30, 2017.

The decrease in cash during the first six months of fiscal 2018 of \$0.6 million was primarily due to cash used in operations partially offset by proceeds from the exercise of stock options. We maintain a portion of our cash and cash equivalents in Euros at our Dutch and French operations and in RMB in our Chinese operations; therefore, changes in the exchange rate have an impact on our cash balances. Restricted cash decreased primarily due to the shipments of Phase II of the Solar turnkey order and achievement of the first of three acceptance tests for Phase I, which resulted in the release of restrictions on the downpayments. Our ratio of current assets to current liabilities was 2.4:1 as of March 31, 2018, and 1.8:1 as of September 30, 2017.

The success of our growth strategy is dependent upon the availability of additional capital resources on terms satisfactory to management. Our sources of capital in the past have included the sale of equity securities, which includes common stock sold in private transactions and public offerings, long-term debt and customer deposits. There can be no assurance that we can raise such additional capital resources on satisfactory terms. We believe that our principal sources of liquidity discussed above are sufficient to support operations for at least the next twelve months. We have never paid dividends on our common stock.

### ***Cash Flows from Operating Activities***

Cash used in our operating activities was \$1.8 million for the six months ended March 31, 2018, compared to cash provided by operations of \$11.6 million for the six months ended March 31, 2017, a decrease of \$13.4 million. During the six months ended March 31, 2018, cash was primarily generated through net income adjusted for non-cash items of \$10.9 million, which was offset by an increase in working capital, primarily related to the turnkey project. A significant portion of the revenue and related cash payments related to the turnkey project remain deferred and restricted, respectively, until completion and acceptance of the integration of the equipment and transfer of the technology. During the six months ended March 31, 2017, cash was provided primarily by an increase in customer deposits, partially offset by advances made to vendors and an increase in restricted cash.

### ***Cash Flows from Investing Activities***

For the six months ended March 31, 2018, cash used in investing activities was \$0.6 million compared to \$0.2 million in the prior year period. The increase is primarily related to increased capital expenditures at our Polishing segment.

### ***Cash Flows from Financing Activities***

For the six months ended March 31, 2018, \$1.2 million of cash provided by financing activities was comprised of \$1.3 million of proceeds received from the exercise of stock options, partially offset by payments on long-term debt of \$0.2 million. For the six months ended March 31, 2017, \$0.1 million of cash used in financing activities was primarily comprised of payments on long-term debt of \$0.3 million net of borrowings of \$0.1 million.

### **Off-Balance Sheet Arrangements**

As of March 31, 2018, we had no off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K promulgated by the Securities and Exchange Commission that have or are reasonably likely to have a current or future effect on financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors.

### **Contractual Obligations**

Unrecorded purchase obligations were \$19.3 million as of March 31, 2018, compared to \$34.4 million as of September 30, 2017, a decrease of \$15.1 million due primarily to reduced vendor commitments as we completed shipment of the equipment for Phase II of the large solar turnkey project. Approximately \$3.0 million and \$11.8 million of the March 31, 2018 and September 30, 2017 contractual obligations, respectively, were prepaid as of those dates in the form of advances to vendors.

Refer to Amtech's Annual Report on Form 10-K, as amended, for the year ended September 30, 2017 for additional information on our other contractual obligations.

### **Critical Accounting Policies**

"Management's Discussion and Analysis of Financial Condition and Results of Operations" discusses our condensed consolidated financial statements that have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the condensed consolidated financial statements, the disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenue and expenses during the reporting period.

On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, inventory valuation, accounts and notes receivable collectability, warranty and impairment of long-lived assets. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances. The results of these estimates and judgments form the basis for making conclusions about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

A critical accounting policy is one that is both important to the presentation of our financial position and results of operations, and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. These uncertainties are discussed in Part I, Item 1A of our Annual Report on Form 10-K, as amended, for the year ended September 30, 2017. We believe our critical accounting policies relate to the more significant judgments and estimates used in the preparation of our consolidated financial statements.

We believe the critical accounting policies discussed in the section entitled "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies" in our Annual Report on Form 10-K, as amended, for the fiscal year ended September 30, 2017 represent the most significant judgments and estimates used in the preparation of our consolidated financial statements. There have been no significant changes in our critical accounting policies during the six months ended March 31, 2018.

### **Impact of Recently Issued Accounting Pronouncements**

For discussion of the impact of recently issued accounting pronouncements, see "Part I, Item 1: Financial Information" under "Impact of Recently Issued Accounting Pronouncements."

**Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

There have been no material changes in our reported market risks, as described in “Quantitative and Qualitative Disclosures About Market Risk” in Part II, Item 7A of our Annual Report on Form 10-K, as amended, for the year ended September 30, 2017.

**Item 4. CONTROLS AND PROCEDURES**

***Disclosure Controls and Procedures***

Our management, including the Chief Executive Officer (“CEO”) and the Chief Financial Officer (“CFO”), has carried out an evaluation of the effectiveness of our disclosure controls and procedures as of March 31, 2018, pursuant to Exchange Act Rules 13a-15(e) and 15(d)-15(e). Disclosure controls and procedures means controls and other procedures that are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to management, including the principal executive and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. Based upon that evaluation, our CEO and CFO have concluded that as of such date, our disclosure controls and procedures in place were effective.

***Changes in Internal Control Over Financial Reporting***

There were no changes in Amtech’s internal control over financial reporting during the six months ended March 31, 2018 that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

## PART II. OTHER INFORMATION

### Item 1. Legal Proceedings

For discussion of legal proceedings, see “Part I, Item 1: Financial Information” under “Commitments and Contingencies.”

### Item 1A. Risk Factors

In addition to the other information set forth in this Quarterly Report, you should carefully consider the factors discussed in Part I, Item 1A “Risk Factors” of our Annual Report on Form 10-K, as amended, for the fiscal year ended September 30, 2017. There have been no material changes to the risk factors previously disclosed in our Form 10-K, as amended, for the fiscal year ended September 30, 2017, other than as described in the Overview above, and the supplemental risk factors set forth below:

#### *Recent changes to U.S. tax laws may adversely affect our financial condition or results of operation and create the risk that we may need to adjust our accounting for these changes.*

The Tax Cuts and Jobs Act (the “Act”), enacted on December 22, 2017, makes significant changes to U.S. tax laws and includes numerous provisions that affect businesses, including ours. For instance, as a result of lower corporate tax rates, the Act tends to reduce both the value of deferred tax assets and the amount of deferred tax liabilities. It also limits interest rate deductions and the amount of net operating losses that can be used each year and alters the expensing of capital expenditures. Other provisions have international tax consequences for businesses like ours that operate internationally. The Act is unclear in certain respects and will require interpretations and implementing regulations by the Internal Revenue Service, as well as state tax authorities, and the Act could be subject to amendments and technical corrections, any of which could lessen or increase the adverse (and positive) impacts of the Act. The accounting treatment of these tax law changes is complex, and some of the changes may affect both current and future periods. Others will primarily affect future periods. As discussed elsewhere in this Quarterly Report on Form 10-Q, we believe our analysis and computations of the tax effects of the Act on us is partially, but not entirely, complete. For instance, we are still in the process of analyzing the earnings and profits and tax pools of our foreign subsidiaries to estimate the effects of the one-time repatriation transaction tax on certain net accumulated earnings and profits of our foreign subsidiaries. Consistent with guidance from the Securities and Exchange Commission, our financial statements reflect our estimates of the tax effects of the Act on us as of March 31, 2018, to the extent we have been able to make such preliminary determinations. Although we believe these estimates are reasonable, they are provisional and may be adjusted prior to the end of fiscal 2018. We intend to complete accounting for the Act by the end of fiscal 2018. Any adjustments to our provisional estimates or the effects of currently unknown impacts of the Act on us could affect our current or future financial statements, or both.

#### *The United States could withdraw from or materially modify certain international trade agreements, or change tax provisions related to the global manufacturing and sales of our products.*

A portion of our business activities are conducted in foreign countries, including China, Malaysia, Taiwan, France and the Netherlands. Our business benefits from free trade agreements, and we also rely on various U.S. corporate tax provisions related to international commerce as we build, market and sell our products globally. The current presidential administration has made comments suggesting that it is not supportive of certain existing international trade agreements. At this time, it remains unclear what the current presidential administration will do with respect to these international trade agreements and U.S. tax provisions related to international commerce. Any action to withdraw from or materially modify international trade agreements, or change corporate tax policy related to international commerce, could adversely affect our financial condition and results of operations.

### Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

#### *Issuer Purchases of Equity Securities*

On March 28, 2018, we announced that our Board of Directors approved a stock repurchase program, pursuant to which we may repurchase up to \$4 million of our outstanding common stock, par value \$0.01 per share, over a one-year period, commencing on April 2, 2018. Repurchases under the program will be made in open market transactions at prevailing market prices, in privately negotiated transactions, or by other means in compliance with the rules and regulations of the Securities and Exchange Commission; however, we have no obligation to repurchase shares and the timing, actual number, and value of shares to be repurchased is subject to management’s discretion and will depend on the Company’s stock price and other market conditions. We may, in the sole discretion of the Board of Directors, terminate the repurchase program at any time while it is in effect. We intend to retire any repurchased shares. There were no shares repurchased during the quarter ended March 31, 2018.

### Item 3. Defaults Upon Senior Securities

None.

**Item 4. Mine Safety Disclosures**

Not applicable.

**Item 5. Other Information**

None.

**Item 6. Exhibits**

EXHIBIT NO.	EXHIBIT DESCRIPTION	INCORPORATED BY REFERENCE				FILED HEREWITH
		FORM	FILE NO.	EXHIBIT NO.	FILING DATE	
<a href="#">31.1</a>	<a href="#">Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended</a>					X
<a href="#">31.2</a>	<a href="#">Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended</a>					X
<a href="#">32.1</a>	<a href="#">Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>					X
<a href="#">32.2</a>	<a href="#">Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.PRE	Taxonomy Presentation Linkbase Document					X
101.CAL	XBRL Taxonomy Calculation Linkbase Document					X
101.LAB	XBRL Taxonomy Label Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

AMTECH SYSTEMS, INC.

By /s/ Lisa D. Gibbs

Dated: May 10, 2018

Lisa D. Gibbs

Vice President – Chief Accounting Officer

(Principal Accounting Officer and Duly Authorized Officer)



Exhibit 31.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES  
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)  
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Fokko Pentinga, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amtech Systems, Inc. (the “registrant”),
2. Based on my knowledge, this quarterly 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 quarterly 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 quarterly report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

By /s/ Fokko Pentinga

Fokko Pentinga

President and Chief Executive Officer

Amtech Systems, Inc.

Date: May 10, 2018

Exhibit 31.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES  
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)  
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Robert T. Hass, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amtech Systems, Inc. (the “registrant”),
2. Based on my knowledge, this quarterly 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 quarterly 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 quarterly report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

By /s/ Robert T. Hass

Robert T. Hass

Vice President – Finance and Chief Financial Officer

Amtech Systems, Inc.

Date: May 10, 2018

Exhibit 32.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

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

In connection with the Quarterly Report of Amtech Systems, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Fokko Pentinga, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

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

By /s/ Fokko Pentinga

Fokko Pentinga

President and Chief Executive Officer

Amtech Systems, Inc.

Date: May 10, 2018

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.

Exhibit 32.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

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

In connection with the Quarterly Report of Amtech Systems, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert T. Hass, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. sections 1350, as adopted pursuant to sections 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

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

By /s/ Robert T. Hass

Robert T. Hass

Vice President – Finance and Chief Financial Officer

Amtech Systems, Inc.

Date: May 10, 2018

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.